

Amendments to the Claims:

Claim 1 (currently amended): A scanner comprising:

- a) a flatbed-scanner scan bar movable along a subscan axis;
- b) a first scan-bar homing reference;
- c) a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference; and
- d) an image placement area disposed between the first and second scan-bar homing references.

Claim 2 (currently amended): The scanner of claim 1 wherein the first scan-bar homing reference is a first scan-bar homing and calibration reference ~~and/or~~ or the second scan-bar homing reference is a second scan-bar homing and calibration reference.

Claim 3 (original): The scanner of claim 2 wherein the each of the calibration references is colored.

Claim 4 (original): The scanner of claim 3 wherein the color is selected from a group consisting of white, black, gray and a combination of the foregoing colors.

Claim 5 (original): The scanner of claim 1 wherein the first scan-bar homing reference and the second scan-bar homing reference are each further comprised of a geometric shape.

Claim 6 (original): The scanner of claim 5 wherein the first scan-bar homing reference and the second scan-bar homing reference are different from one another.

Claim 7 (currently amended): The scanner of claim 5 wherein each of first and second scan-bar homing references are positioned on the scanner by use of one of a group consisting of molding, painting, and labeling.

Claim 8 (original): The scanner of claim 1 wherein the first scan-bar homing reference and the second scan-bar homing reference are each further comprised of a position switch.

Claim 9 (original): The scanner of claim 8 wherein the position switch comprises an optical break sensor.

Claim 10 (currently amended): A method of scanning an image or images comprising:

- a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along the subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;
- b) performing a prescan or an image scan of an image by moving the scan bar along the subscan axis from the first scan-bar homing reference in relation to the image; and
- c) performing a prescan or an image scan of the image or of an additional image by moving the scan bar along the subscan axis from the second scan-bar homing reference in relation to the image or the additional image.

Claim 11 (currently amended): A method for scanning an image comprising the steps of:

- a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along a subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;
- b) performing a plurality of prescans of the image by alternately moving the scan bar in relation to the image along the subscan axis from the first scan-bar homing reference to the second scan-bar homing reference for each odd numbered prescan of the plurality of prescans and from the second scan-bar homing reference to the first scan-bar homing reference for each even numbered prescan of the plurality of prescans; and
- c) after step b), image scanning the image by moving the scan bar in relation to the image along the subscan axis.

Claim 12 (original): The method of claim 11 also including the step of establishing a position reference for the scan bar each time before the scan bar is moved from each of the first and second scan-bar homing references.

Claim 13 (original): The method of claim 12 wherein the first scan-bar homing reference is a first scan-bar homing and sensor-element calibration reference, and also including, before step b), the step of calibrating the plurality of sensor elements from a scan of the first scan-bar homing reference by the scan bar.

Claim 14 (original): The method of claim 13 wherein the step of calibrating comprises using a calibration reference selected from a group consisting of a white calibration reference, a black calibration reference, a gray calibration reference and a calibration reference that is a combination of the foregoing calibration references.

Claim 15 (original): The method of claim 11 also including after step c), the step of moving the scan bar along the subscan axis to the closer of the first and second scan-bar homing references.

Claim 16 (original): The method of claim 11 wherein the scanner is a component of a printing system.

Claim 17 (currently amended): A method for scanning an image comprising the steps of:

a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along a subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;

b) disposing the scan bar about the first scan-bar homing reference;

c) after step b), performing a first prescan of the image by moving the scan bar from the first scan-bar homing reference to the second scan-bar homing reference in relation to the image along the subscan axis; and

d) after step c), performing a second prescan of the image by moving the scan bar from the second scan-bar homing reference to the first scan-bar homing reference in relation to the image along the subscan axis.

Claim 18 (original): The method of claim 17 also including the step of establishing a position reference for the scan bar each time before the scan bar is moved from each of the first and second scan-bar homing references.

Claim 19 (original): The method of claim 18 wherein the first scan-bar homing reference is a first scan-bar homing and sensor-element-calibration reference, and also including, between steps b) and c), the step of calibrating the plurality of sensor elements from a scan of the first scan-bar homing reference by the scan bar.

Claim 20 (original): The method of claim 19 wherein the step of calibrating comprises using a calibration reference selected from a group consisting of a white calibration reference, a black calibration reference, a gray calibration reference and a calibration reference that is a combination of the foregoing calibration references.

Claim 21 (original): The method of claim 17 wherein the scanner is a component of a printing system.

Claim 22 (currently amended): A method for scanning images comprising the steps of:

a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along a subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;

b) disposing the scan bar about the first scan-bar homing reference;

c) prescanning a first image by moving the scan bar from the first scan-bar homing reference to the second scan-bar homing reference in relation to the image along the subscan axis;

d) after step c), image scanning the first image by moving the scan bar from the second scan-bar homing reference toward the first scan-bar homing reference in relation to the image along the subscan axis;

e) after step d), moving the scan bar to the second scan-bar homing reference, wherein the second scan-bar homing reference is the closer of the first and second scan-bar homing references to the scan bar at the completion of step d);

f) after step e), prescanning a second image, which is different from the first image, by moving the scan bar from the second scan-bar homing reference to the first scan-bar homing reference in relation to the image along the subscan axis; and

g) after step f), image scanning the second image by moving the scan bar from the first scan-bar homing reference toward the second scan-bar homing reference in relation to the image along the subscan axis.

Claim 23 (original): The method of claim 22 also including the step of establishing a position reference for the scan bar each time before the scan bar is moved from each of the first and second scan-bar homing references.

Claim 24 (original): The method of claim 23 wherein the first scan-bar homing reference is a first scan-bar homing and sensor-element-calibration reference, and also including, between steps b) and c), the step of calibrating the plurality of sensor elements from a scan of the first scan-bar homing reference by the scan bar.

Claim 25 (original): The method of claim 24 wherein the second scan-bar homing reference is a second scan-bar homing and sensor-element-calibration reference, and also including, between steps e) and f), the step of calibrating the plurality of sensor elements from a scan of the second scan-bar homing reference by the scan bar.

Claim 26 (original): The method of claim 25 wherein the steps of calibrating from a scan the first and second scan-bar homing references further comprises using a calibration reference selected from a group consisting of a white calibration reference, a black calibration reference, a

gray calibration reference and a calibration reference that is a combination of the foregoing calibration references.

Claim 27 (original): The method of claim 22 wherein the scanner is a component of a printing system.

Claim 28 (currently amended): A method for scanning images comprising the steps of:

a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along a subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;

b) establishing a position reference for the scan bar including disposing the scan bar about the first scan-bar homing reference;

c) after step b), image scanning the first image by moving the scan bar from the first scan-bar homing reference toward the second scan-bar homing reference in relation to the image along the subscan axis;

d) after step c), establishing an updated position reference for the scan bar including disposing the scan bar about the second scan-bar homing reference; and

e) after step d), image scanning a second image, which is different from the first image, by moving the scan bar from the second scan-bar homing reference toward the first scan-bar homing reference in relation to the image along the subscan axis.

Claim 29 (original): The method of claim 28 wherein the first scan-bar homing reference is a first scan-bar homing and sensor-element-calibration reference and/or the second scan-bar homing reference is a second scan-bar homing and sensor-element-calibration reference, and also including, between steps b) and c), the step of calibrating the plurality of sensor elements from a scan of the first scan-bar homing reference by the scan bar and/or, between steps d) and e), the step of calibrating the plurality of sensor elements from a scan of the second scan-bar homing reference by the scan bar.

Claim 30 (original): The method of claim 29 wherein the steps of calibrating from a scan the first and second scan-bar homing references further comprises using a calibration reference selected from a group consisting of a white calibration reference, a black calibration reference, a gray calibration reference and a calibration reference that is a combination of the foregoing calibration references.

Claim 31 (currently amended): A method for scanning and printing an image comprising the steps of:

a) obtaining a scanner including a subscan axis, including a flatbed-scanner scan bar movable along a subscan axis and having a plurality of sensor elements, including a first scan-bar homing reference and including a second scan-bar homing reference spaced apart along the subscan axis from the first scan-bar homing reference;

b) establishing a position reference for the scan bar including disposing the scan bar about the first scan-bar homing reference;

c) after step b), performing a first image scan of the image by moving the scan bar from the first scan-bar homing reference toward the second scan-bar homing reference in relation to the image along the subscan axis;

d) after step c), printing a copy of the first image scan of the image;

e) after step d), establishing an updated position reference for the scan bar including disposing the scan bar about the second scan-bar homing reference;

f) after step e), performing a second image scan of the image by moving the scan bar from the second scan-bar homing reference toward the first scan-bar homing reference in relation to the image along the subscan axis; and

g) after step f), printing a copy of the second image scan of the image.

Claim 32 (original): The method of claim 30 wherein the first scan-bar homing reference is a first scan-bar homing and sensor-element-calibration reference, and also including, between steps b) and c), the step of calibrating the plurality of sensor elements from a scan of the first scan-bar homing reference by the scan bar.

Serial No.: 10/754,125
Attorney Docket No.: 2003-0140.01
Amendment

Claim 33 (currently amended): The method of claim 32 wherein the step of calibrating from a scan the first ~~can-bar~~ scan-bar homing reference further comprises using a calibration reference selected from a group consisting of a white calibration reference, a black calibration reference, a gray calibration reference and a calibration reference that is a combination of the foregoing calibration references.